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A NEW SPECIES OF *POLIA* OCHSENHEIMER

FROM CALIFORNIA AND NOTES ON *POLIA DISCALIS* (GROTE) (NOCTUIDAE:HADENINAE)

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Polia piniae Buckett and Bauer, new species, has long been masquerading under the name *P. discalis* (Grote), and until recently this error has gone unnoticed. While working over this section of the genus *Polia*, the authors recognized a confused situation, and with concentrated effort and further research, it was agreed that there were at least two species under the name *discalis*. We also have a large series of *P. discalis* from the eastern Sierra Nevada of California which is perhaps of subspecific rank, but at the present time it is felt best to retain this series as merely a light colored form of *discalis*.

POLIA PINIAE Buckett and Bauer, new species

Male: Ground color of primaries a whitish grey, transverse lines hardly discernable. Head with vertex and frons clothed predominently in whitish flattened hairs, but with some dark brown flattened hairs intermingled; frons smooth, broadly truncately rounded; palpi clothed exterolaterally with whitish flattened hairs, but predominently with brown and dark brown elongate, flattened hairs; antennae appearing dorso-ventrally bicolor under 10X power, with scape and pedicle clothed in brown and white intermixed elongate scales; flagellomeres with small fasciculate hairs ventrally, dorsally clothed in whitish and brownish scales; compound eyes moderately to heavily haired; latrad of eyes, a buch of black fine hairs forms a dense cluster. Thorax with collar composed of flattened hairs and elongate scales, basally whitish, medially black (so as to form a conspicuous transverse bar), apically white tipped; dorsally clothed in silvery-whitish elongate scales, some brown elongate scales intermixed also; anterior tuft composed of predominently dark brown flattened, dentate scales, some whitish scales of same type intermixed; posteriorly from anterior tuft a thin brown line of flattened hairs leads to suggestion of diminutive divided posterior tuft; patagia exterolaterally composed of dark brown fine silken hairs; legs with pro and meso femora dorsally clothed in brown, metafemora clothed dorsally in dirty whitish colored scales; all legs with tibiae clothed in mixture of whitish and brown scales; tarsi clothed dorsobasally in dark brown

Fig. 1. Distribution map indicating the presently known distribution of *Polia piniae* Buckett and Bauer.

scales, dorso-apically and ventrally clothed in whitish scales; ungues moderately interolaterally bifid; primaries dorsally clothed in ground color, sparsely irrorated with fuscous scales (which gives a light asheÿ grey, or greyish white appearance); basal line present as thin black apically pointed "V" on costa, thence wanting, or hardly discernable; basal and transverse anterior areas of ground color, contiguous; transverse anterior line present on costa as is basal line, but broader and geminate costally, thence diminishing into a faint transverse line to inner margin, hardly discernable; median area with very slightly darker shade than ground color; orbicular very broad, subquadrangular, open on costal margin, outlined faintly in black, filled with ground color; area between orbicular and reniform irrorated with blackish scales, less than width of orbicular; reniform large, color as in orbicular, nearly contiguous with orbicular on Cu_1; transverse posterior line represented as dark shade on costa, thence almost entirely obliterated; subterminal space of ground color; subterminal line strongly represented costally, opposite of discal area and in tornus area (as in figure 2); tornus area with blackish bilobed mark, lobes terminally directed; terminal space of ground color; terminal line faint, represented by blackish lunules between veins; fringes basally whitish, thence of intermixed brown and whitish spatulate scales; ventral surface with costal edge and outer margin silvery-grey; central portion of wing fuscous; veins outlined in deep smokey fuscous; transverse posterior line represented costally as dark dash; secondaries dorsally light ochreous brown, basally and terminally darker than lighter median band; veins outlined in smokey; discal lunule faint, dark brown; terminal line dark brown; fringes tricolor, basally ochreous, medially brown, apically white tipped; ventral surface whitish, veins faintly outlined in fuscous; discal lunule faint; remainder of surface as in dorsal surface. Abdomen dorsally whitish; mid dorsal hairs blackish, almost appearing tuft-like; posteriorly whitish hairs and scales intermixed with dark brown; ventrally clothed in whitish hairs. Greatest expanse of forewing 25 mm. Genitalia as in figures 6 and 9.

Female: As in male except antennae lacking fasciculations as in male, but rather possessing fine ciliations; primaries and secondaries slightly darker than in male. Abdomen as in male except slightly darker dorsally. Greatest expanse of forewing 26 mm. Genitalia as in figure 4.

SPECIMENS EXAMINED

HOLOTYPE male: Johnsville, Plumas County, California, 5 July 1962 (Helena J. Pini). Paratypes: all specimens from California unless otherwise stated; 175 males, 39 females; 1 female (designated Allotype), same locality as Holotype, 3 July 1959 (W. R. Bauer and J. S. Buckett); 1 male, *Johnsville,* Plumas Co., 24 July 1955 (W. R. B. & J. S. B.), Bauer-Buckett slide No. 66L2-3; 1 male, 6 July 1962 (H. J. Pini), Bauer-Buckett slide No. 64D26-4; 1 female, 5 August 1962 (H. J. P.), Bauer-Buckett slide No. 66L6-5; 1 female, 10 August 1962 (H. J. P.), Bauer-Buckett slide No. 66L7-2; four males, 1 female, 5 August 1962 (H. J. P.); 1 female, 20 August 1962 (H. J. P.); 1 female, 1 August 1962 (H. J. P.); 14 males, 8 females, 7 August 1962 (H. J. P.); 6 males, 2 females, 9 August 1964 (H. J. P.); 1 female, 11 August 1965 (H. J. P.); 1 male, 21 July 1965 (W . R. B. & J. S. B.); 3 males, 6 July 1965 (H. J. P.); 10 males, 1 female, 24 July 1965 (H. J. P.); 1 male, 27 July 1964 (H. J. P.); 1 male, 21 July 1964 (H. J. P.); 1 male, 13 July 1964 (H. J. P.); 1 male, 16 July 1964 (H. J. P.); 2 males, 24 July 1964 (H .J. P.); 2 males 17 July 1964 (H. J. P.); 1 male, 12 July 1964 (H. J. P.; 1 female, 26 July 1965 (H. J. P.); 13 males, 2 females, 17 July 1964 (H. J. P.); 3 males, 16 July 1964 (H. J. P.); 3 males, 13 July 1964 (H. J. P.); 4 males,

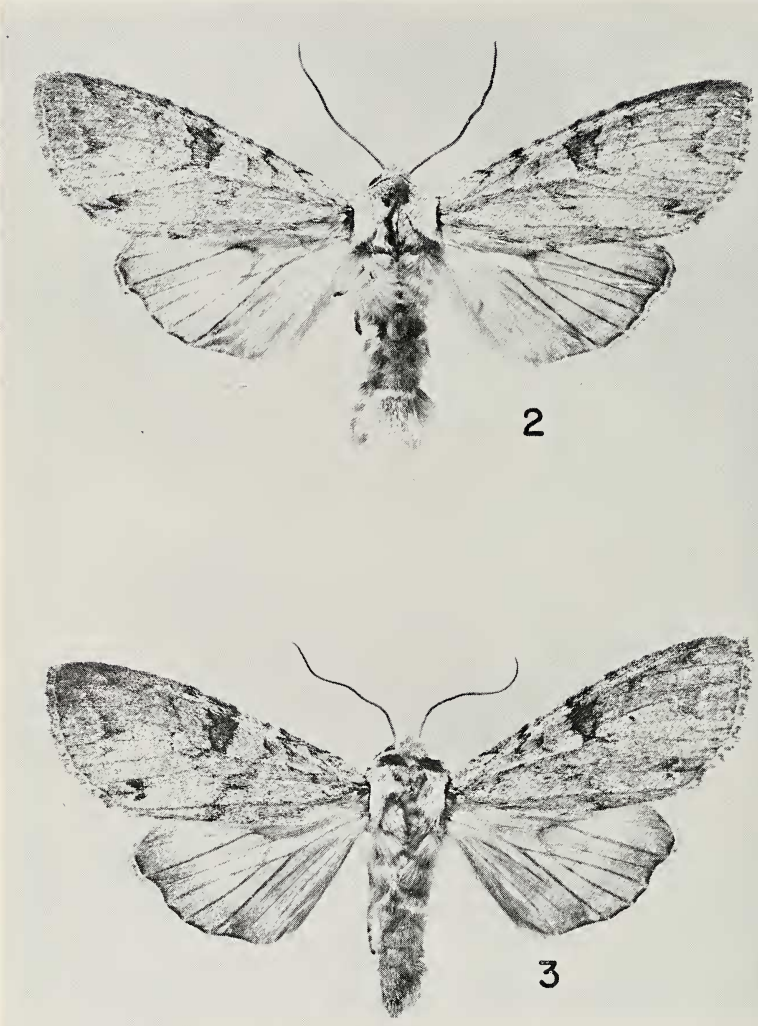
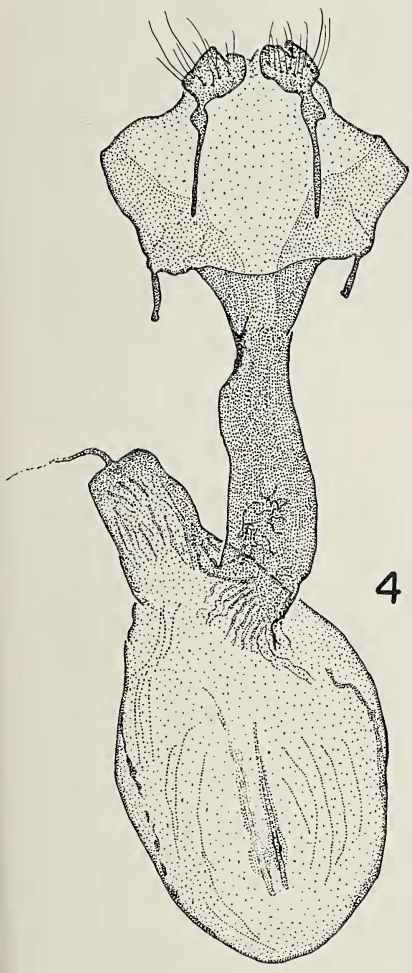


Fig. 2. Holotype male, *Polia piniae*. Johnsville, Plumas Co., California, 5 July 1962 (Helena J. Pini).

Fig. 3. Allotype female, *Polia piniae*. Johnsville, Plumas Co., California. 3 July 1959 (W. R. Bauer and J. S. Buckett).



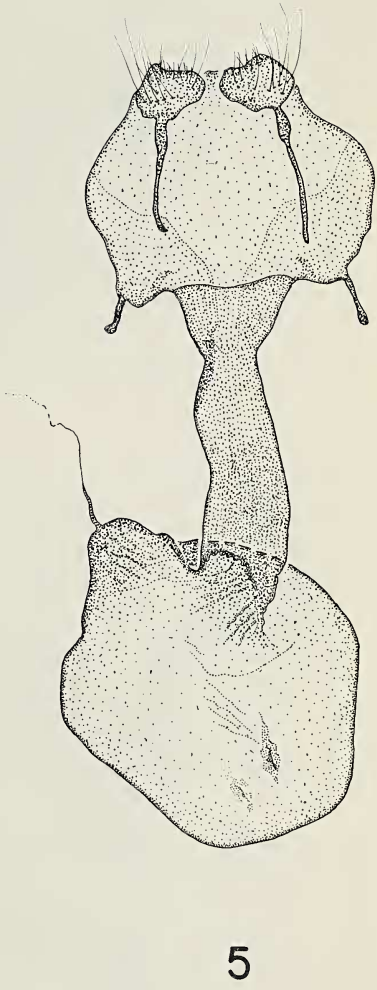


Fig. 4. Paratype female. Genitalia of *Polia piniae*. Johnsville, Plumas Co., 10 August 1962 (H. J. Pini), Bauer-Buckett slide No. 66L7-2.

Fig. 5. Female genitalia of *Polia discalis* (Grote). Rabbit Ears Mountains, 10 miles southeast of Steamboat Springs, Routt Co., Colorado, elevation 8200', 28 July 1962 (J. S. Buckett and G. M. Trenam), Bauer-Buckett slide No. 66L7-1.

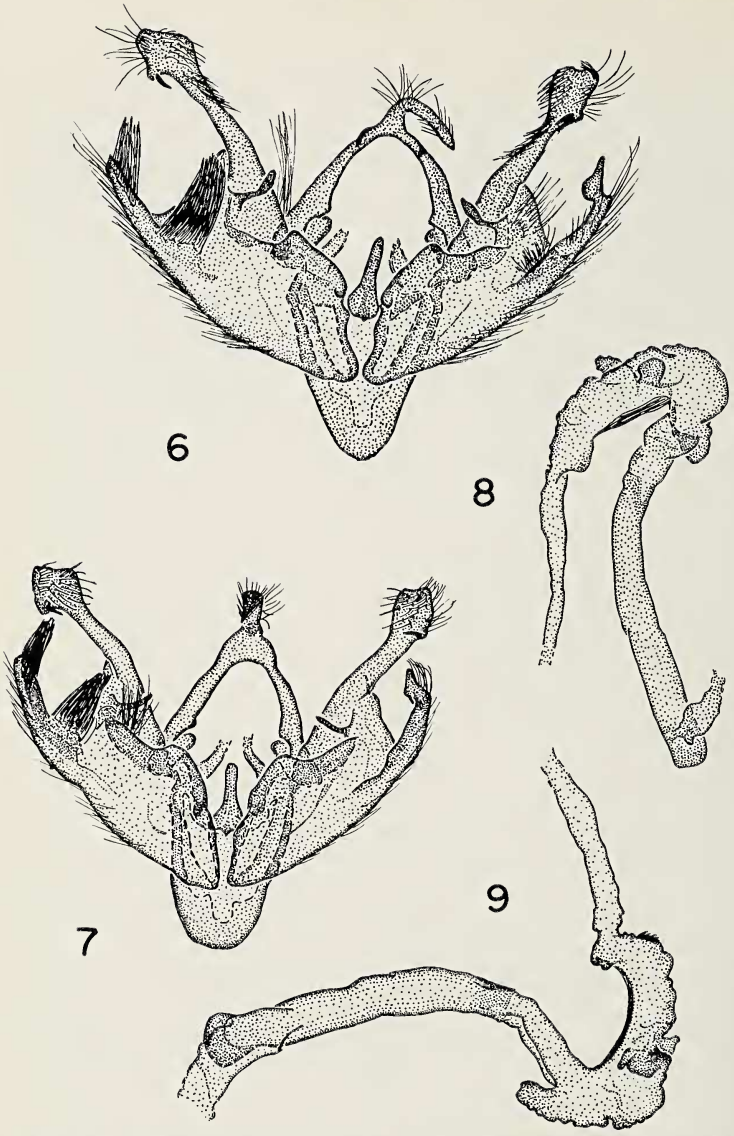


Fig. 6. Paratype male. Genitalia minus aedeagus of *Polia piniae*. Johnsville, Plumas Co., 24 July 1955 (W. R. Bauer and J. S. Buckett), Bauer-Buckett slide No. 66L2-3.

Fig. 7. Male genitalia minus aedeagus of *Polia discalis*. Data same as for figure 5, except for slide No. which is: Bauer-Buckett slide No. 66L2-1.

Fig. 8. Aedeagus of *Polia discalis*. Data same as that for fig. 7.

Fig. 9. Aedeagus for *Polia piniae*. Data same as that for fig. 6.

7 July 1965 (H. J. P.); 1 male, 9 September 1963 (H. J. P.); 2 males, 6 July 1965 (H. J. P.); 1 male, 1 female, 21 July 1964 (H. J. P.); 12 males, 2 females, 19-23 July 1964 (H. J. P.); 6 males, 2 females, 27 July 1964 (H. J. P.); 1 male, 17 July 1962 (H. J. P.); 3 males, 1 female, 11 July 1962 (H. J. P.); 21 males, 1 July 1965 (H. J. P.); 3 males, *Mohawk,* Plumas Co., 4-7 July 1946 (W. R. Bauer); 1 female, 12 July 1946 (W. R. B.); 3 males, *Mt. Ingalls,* Plumas Co., 11 July 1964 (W. R. B., J. S. B., M R Gardner); 4 males, 1 female, *Pinecrest,* Tuolumne Co., 25 July 1965 (Robert Mason); 14 males, 1 female, 9 July 1965 (R. M.); 11 males, 16 July 1965 (R. M.); 1 male, 2 July 1965 (R. M.); 1 male, 2 miles west, *Sonora Pass,* Tuolumne Co., 1 July 1966 (G. M. Buxton); 3 males, *Wentworth Springs,* El Dorado Co., 8 July 1961 (W. E. Simonds); 1 male, *Donner Lake,* Nevada Co., 20 July 1962 (G. M. B.); 3 males, *Carnelian Bay,* Placer Co., 12 July 1965 (F. D. Parker); 3 males, 4 females, *Manzanita Lake,* Shasta Co., 13 August 1963 (G. M. Buxton); 1 male, *Hat Creek,* Shasta Co., 26 July 1964 (R. R. Pinger); 1 male, *Cedar Pass,* 6 miles northwest of Cedarville, Modoc Co., 4 July 1962 (W. R. B., J. S. B., G. M. Trenam); 1 female, *Lassen Creek,* north of Davis Creek, Modoc Co., 28 July 1957 (W. R. B. & J. S. B.); 1 male, *Mineral King,* Tulare Co., 19 July 1963 (W. E. S.); 1 male, 1 female, *Zeypher Cove,* Douglas Co., Nevada, 20 August 1963 (Bobbie Ellis); 1 male, 27 August 1963 (B. E.).

The Holotype is deposited in the Entomology Type Collection, Department of Entomology, University of California, Davis, California. The female Allotype and paratypes are deposited in the private collection of the authors. Other paratypes will be deposited in the following institutions and collections: American Museum of Natural History, New York; California Academy of Sciences, San Francisco; California State Department of Agriculture, Sacramento; Canadian National Collection, Ottawa, Ontario; J. G. Franclemont collection, Ithaca, New York; Los Angeles County Museum of Natural History; United States National Museum, Washington, D. C.; University of California, Berkeley and Davis.

Polia piniae can be readily distinguished from *P. discalis* by the former possessing sparsely fuscous irrorated primaries, therefore appearing ashey-grey, or silvery-grey; whereas, *discalis* possesses primaries that are thickly and evenly irrorated with fuscous, therefore appearing darker or bluish grey. The space between the orbicular and reniform is less than the width of the orbicular in *piniae;* whereas, in *discalis* this same space is as wide as the orbicular or wider in some specimens. Both the male and the female genitalia of *piniae* are specifically distinct from the genitalia of *discalis* also (as can be seen in figures 4-9).

P. piniae is apparently a mid to late summer flier, predominently at moderate elevations in the Sierra Nevada of California and elsewhere it occurs. The light form of *discalis* occurs on the

eastern edge of the Sierras where there is considerable influence from Great Basin type flora; whereas, typical *discalis* occurs at higher elevations in the Rocky Mountainous regions of the central United States, and more specifically in Colorado. To date nothing is known concerning the immature sages of *piniae*.

We take great pleasure in naming this species in honor of the ardent collector and naturalist, Mrs. Helena J. Pini of Johnsville, California. The genitalic illustrations were prepared by the first author.